

27 September 1961

MEMORANDUM FOR: Chief, Technical Plans and Development Staff  
THROUGH: Chief, TISD S.J.  
SUBJECT: Initial Procurement of Parts to Convert the GIANT into a Useful Comparator

JWC  
13 Oct 61

1. The GIANT can serve as a useful 70 mm comparator, utilizing the Richardson projection transformation program. However, several items on it should be changed as soon as possible to improve the system.

a. Arrange for immediate delivery on the [REDACTED] Electrotypewriter purchased with the [REDACTED] This typewriter is directly compatible with either [REDACTED] and can be used on the [REDACTED] while awaiting the [REDACTED]

b. Purchase a [REDACTED] rear projection screen to replace the present viewing screen. Tests indicate that the present screen is only capable of resolving 40-45 lines at the film plane with a 10X magnification on the screen. Substitution of high quality lenses and a higher magnification ratio gave no apparent increase of resolution on the screen.

c. Purchase a new first surface mirror to replace the last mirror in the optical path containing the partial transmission spot.

2. To make a total conversion of the GIANT, i.e., eliminate the tracking characteristic and achieve maximum use as a rear projection comparator, will involve radical design change that should not be attempted until it is definitely established that the tracking capability is unsatisfactory or will never be needed due to changes in future programs. The changes recommended above are minimal and do not prohibit the use of the GIANT as an automatic tracking machine.

[REDACTED]

NPIC/TISD/TIB: [REDACTED] df(2850)

Declass Review by NIMA / DoD

12 Oct '61

ADDITIONAL INFORMATION

1. All work could be performed by [REDACTED] STATINTL

STATINTL

2. The following prices have been received from the [REDACTED] STATINTL

[REDACTED]

1st surface mirror, glazing quality plate glass with  $\frac{1}{2}$  wave  
wave length Silicon Oxide protective coating with approxi-  
mately 2 weeks delivery. [REDACTED]

STATINTL

STATINTL

[REDACTED] viewing screen, non-stereo LS-60G $\frac{1}{4}$  with one  
week delivery. [REDACTED]

STATINTL

The above items could be purchased from [REDACTED] on our open con- STATINTL  
tract with them and the entire job could be completed within one month  
or less.

[REDACTED]

STATINTL

STATINTL

STATINTL

<b>TRANSMITTAL SLIP</b>		DATE
TO: [REDACTED]		
ROOM NO.	BUILDING	
REMARKS: <i>John - This looks like [REDACTED] well spent &amp; I would like to have it done. How do we take care of para. 1-2-?</i>		
<i>Steve.</i>		
FROM:		
ROOM NO.	BUILDING	EXTENSION

FORM NO. 241  
1 FEB 55

REPLACES FORM 36-8  
WHICH MAY BE USED.

GPO : 1957-O-439445

(47)